

## A Biblical Precedent for the Coase Theorem?

*Andrew Schein*  
*Lecturer in Economics*  
*Netanya Academic College*  
*Israel*

This article suggests that the law of Deuteronomy 23:25, 26, which allows all people unlimited access to fields, is referring to ownerless fields that have only two possible uses, as farmland or as passageways for travelers. If the value of the land as a pathway for travelers is greater than the value of the land as farmland, then the field will remain as a passageway. However, if the value of the land as farmland is greater than the value of the land as a passageway, then the farmers will cultivate the land, provided the transaction costs from cultivating the land is lower than the expected benefits from the produce. These examples correspond to the Coase Theorem, as absent transaction costs, the land will achieve its maximum efficiency, but with sufficient transaction costs, then the land will not be used productively and will remain barren.

In a groundbreaking article, Coase (1960) challenged the historical view that when the actions of a firm have harmful effects on others, the firm must be restrained. Instead, Coase argued, “when the parties affected by externalities can negotiate costlessly with one another, an efficient outcome results no matter how the law assigns responsibility for damages.”<sup>1</sup> This argument has come to be called the Coase Theorem, and it has led to the belief that when there are no transaction costs there is no need for government involvement in the presence of externalities. However, as noted by Coase (1960, 1988) and McCloskey (1998) the assumption of zero transactions costs is unrealistic and hence in the presence of negative externalities the optimum outcome will not necessarily be attained through negotiations.

This article will examine a difficult biblical law and suggest a novel interpretation that provides an example of the Coase Theorem both with transaction costs and in the absence of transactions costs. The law can then be viewed as a precedent for the Coase Theorem.

Chapter 23 of the book of Deuteronomy records an assortment of laws and one of these laws (23:25, 26) is:

When you enter your neighbor's vineyard you may eat grapes freely until you are satisfied but into your container you shall not put them. When you enter your neighbor's standing grain you may pluck off ears in your hand, but a sickle you may not wield on your neighbor's standing grain.<sup>2</sup>

This law allows one to eat the grapes or grain from another person's field, but because one cannot put the grapes into a container or use a sickle to cut the grain, a person cannot take more than what can be eaten when in the field.<sup>3</sup> We will review two approaches to understanding this law and argue that neither is satisfactory. Instead, we will suggest a new approach to understanding this law based on the insights of the Coase Theorem.

## The Law Is to Aid Travelers

The most popular understanding of the verses is that the law is intended to aid hungry travelers. For example, Josephus in the first century (1934, p. 115) writes, "Nor yet, when autumn fruits are at their prime, must you forbid wayfarers to touch them, but let them take their fill, as if they were their own, be they natives or strangers ... but let it not be permitted to them to carry any of them away." Modern commentators have understood the verses in a similar fashion, as for example, Driver (1965, p. 269) writes, "The owner of a vineyard or field of grain, is not to grudge the passerby a few grapes or ears of corn, if he plucks them as he walks along." Furthermore, we know that in the Middle East both in the first century (Matt. 12) and in the nineteenth century (Doughty, 1923, p. 52; Robinson, 1970, p. 493) people entered the fields of other people to eat their produce.

However, this approach is difficult for several reasons. First, while one might envisage the law as referring to somebody walking along a path that bordered on a field, the language of the verses, "when you enter neighbor's vineyard or field," implies that the law refers to where people regularly walked through the property of other people, and yet this was not considered trespassing. Tigay (1996, p. 219) writes, "Apparently fields and vineyards were laid

out in a way that people often had to pass through those belonging to others.” This is the implication of the verses, but is this realistic?

A second difficulty with the idea that the law is to assist travelers is that with this understanding the law gives greater assistance to travelers than to the poor. Deuteronomy 24:19–21 records that when a person harvests his field but leaves some crops behind, then the poor have the right to harvest the field. The poor could only enter another person’s field after it was harvested, but according to the interpretation above of Deuteronomy 23:25 and 26, all travelers, and not necessarily just poor travelers, are able to enter another person’s field even before the field has been harvested. Why would the law be more concerned with the well-being of the traveler than the well-being of the poor?

A third problem is that there is contradictory “empirical evidence.” Isaiah 1:8 and 5:2 refer to the practice of the Israelites to place watchtowers in their fields, and presumably this was done to stop both thieves and animals from eating the produce of the fields.<sup>4</sup> This indicates that people were not allowed *carte blanche* to enter other people’s fields.

A fourth problem with the understanding that the law allows for travelers to enter the field is that while there is a limit as to how much one can take when one enters the field, there is no limit as to how many times a person can enter the field or how many people can enter the field. Even if a person just takes a few grapes or grains, if a person repeatedly enters the field or many people enter the field, then there could be nothing left for the owner of the field. Rav, a third-century talmudic sage, argued that this opinion that allows any person to enter the field would not allow anybody to live as it would not be worthwhile for a person to cultivate one’s fields.<sup>5</sup>

The damage to the individual farmer would depend on how many people eat from his crops and how extensive his acreage is. If the farmer has a large estate, and few people enter and eat from his produce, then the loss would be minimal and could be considered as charity. However, if the field is relatively small and/or many people enter the field, the loss to the farmer could be substantial. Presumably, the assumption of the adherents to the approach that the law is to aid travelers is that few people will enter the field. This assumption might be because they understand the law is really just an allowance to travelers but locals will not avail themselves of this liberty.<sup>6</sup> However, the text makes no mention of travelers and instead uses the words *your neighbor*, which means that the law is primarily for locals. Accordingly, the law of Deuteronomy 23:25 and 26 could impoverish farmers with small plots, who tend to be relatively poor, and this makes it difficult to accept that the law really intended to allow unlimited access to other people’s fields.

## The Law Is to Assist Laborers

The Talmud develops a different understanding of these laws: The permission to eat from the crops is only for the laborer when he is harvesting the crops.<sup>7</sup> The Talmud records:

These laborers may eat in accordance with the Law (Deut. 23:25, 26); he that labors on what is attached to the soil when the process of ripening is complete, and he who works on what is detached from the soil as long as its growth is from the soil and its complete preparation is not yet finished. And these are they who may not eat: Whosoever labors on what is attached to the soil when the process of ripening is not yet complete, and one who works on what is detached from the soil after its complete preparation is finished or whose growth is not from the soil.<sup>8</sup>

According to this understanding, the law is a type of labor-relations law to assist workers who are working the field harvesting the crops. The restriction of the law to the laborers solves the problems mentioned above because the eating by the workers will not cause extensive damage to the owner of the field, and the worker is allowed to be in the field, which removes the problem of trespassing.

Yet, this second approach is also difficult because there is no indication in the text that the law is limited just to a worker at the time when he is harvesting the field. In an attempt to answer this question, Maimonides, a twelfth-century rabbinic scholar, wrote:

From the oral tradition it has been learned that these passages of Scripture (Deut. 23:25, 26) refer only to a man who has been hired by the owner. For if he was not hired, who permitted him to come into his neighbor's vineyard or standing crops without his neighbor's consent? These passages can therefore be understood only thus: When you come into the domain of the owner to work you may eat of that at which you are working.<sup>9</sup>

While Maimonides is certainly correct that people cannot usually enter into other people's fields, this argument does not imply that the law is referring to a worker. Luzzatto, a nineteenth-century biblical commentator, extends the Talmudic approach as he argues that the law allows any person who has permission to enter somebody else's field to eat from the field.<sup>10</sup> Yet, this still limits access to the field when a simple reading of the text indicates that the right of entry to the fields is unrestricted.

Accordingly, both approaches to understanding Deuteronomy 23:25 and 26 are difficult, and there is a need for a new understanding of the verses.

## The Law Is to Make Efficient Use of Ownerless Land

To understand the law of Deuteronomy 23:25 and 26, one must resolve the question of trespassing. How can it be that a person can just enter his neighbor's field? One might answer that the Bible does not respect property rights, but in the Pentateuch there are five laws or cases that demonstrate the importance of upholding property rights.

First, Abraham reproved a local ruler in Canaan named Abimelech because Abimelech's servants had stolen Abraham's wells (Gen. 21:25; see also Gen. 26:15–22), and then when Abraham bought a burial plot for his wife, he paid a full price in order that his ownership of the land could not be contested (Gen. 23:16).<sup>11</sup>

Second, the prohibition of theft is mentioned three times in the Pentateuch (Ex. 20:13; Lev. 19:11; and Deut. 5:17), and the first and last of these examples figure prominently as the prohibition is recorded within the Decalogue.<sup>12</sup> The prohibition of stealing is extended in the Decalogue of Deuteronomy that one may not even covet the land of one's neighbor (Deut. 5:18).

Third, Leviticus 25:1–34 records laws concerning land tenure, and within this set of laws, Leviticus 25:14–17 admonishes the purchaser of the land to pay a fair price for the land and not resort to fraud or force.

Fourth, when the Israelites were traveling to the Promised Land, they had to pass through the land of other nations, and Moses, when asking permission to pass through these lands, specifically stated that the people would only travel on the main highway and not trespass (Num. 20:17–19; 21:22; and Deut. 2:27, 28).

Fifth, Deuteronomy 19:14 adds a separate prohibition for stealing land, as the verse records, "You shall not move your countryman's landmark, set up by previous generations, in the property that will be allotted to you in the land that the Lord your God is giving you to possess," (JPS translation in Tigay, 1996, p. 183). This law is referred to again in Deuteronomy 27:17, which records that a person is cursed if he removes his countryman's landmark.

Consequently, instead of viewing the law of Deuteronomy 23:25 and 26 as one where the passerby is entering the private property of the farmer, it is preferable to understand the law that it is the farmer who is attempting to plant in the public property. With this understanding, the field could be an ownerless

field that both the farmer and the person entering the field have equal rights to enter.

Interestingly, in Deuteronomy 23:26, the Bible refers to the desired object as the neighbor's *standing grain*, and this term is not a synonym for a field (see Ex. 22:5). Deuteronomy 23:26 does not state that the person entered his neighbor's field. However, when the Bible records the prohibition not to covet, it specifically refers to the field as belonging to the neighbor (Deut. 5:18), and with regard to the law that a person must leave food for the poor, the text explicitly states that the person who harvests the field harvests his own field (Deut. 24:19).<sup>13</sup> Accordingly, the understanding of Deuteronomy 23:26 could be that the standing grain is considered the neighbor's because he cultivated the field, but he is not the owner of the field. With this reading, the phrase "your neighbor's vineyard" in Deuteronomy 23:25 would be understood in a similar fashion—the vineyard is considered the viticulturist's because he tended the vineyard, but he does not own the land.

If this assumption that the field is ownerless is correct, then the farmer does not own the land, and it is reasonable that everybody else has unlimited access to the field and can eat of the produce. Thus, the main point of the law is not the eating of the produce, but the limitation on using a container or a sickle, which limits the possibility that the farmer who worked the land should lose all of his produce to one person. The case does not compare with that of a poor person entering the field to harvest crops, as those cases are where the field is the private property of the owner, and the owner of the field then has the first opportunity to harvest his crops.<sup>14</sup>

How can a person plant crops in a field that he does not own? The answer is that this allowance increases the productivity of land. If land is ownerless, then nobody works the land and it sits abandoned, but if people can work the land, then there is an increase in the output of the country.

Who determines who can use the land if the land is ownerless? To answer this question we will assume that the ownerless land has only two possible uses, as farmland or as a passageway for travelers. The basis for this assumption is that these cases are the two examples that are referred to in Deuteronomy 23:25 and 26 and including other possibilities are beyond the scope of these verses. With this assumption, the law of Deuteronomy 23:25 and 26 establishes a framework for farmers and travelers to share the land. We will examine three different possibilities.

The first possibility is that the land is not used as a passageway and nobody other than one farmer demonstrates any interest in the land. In this case, the farmer benefits from using the land and there is no harm to society from his

actions. The farmer would not become the owner of the field, but he is able to make use of a field that otherwise would have remained uncultivated.

A second possibility is that one farmer is the only person who desires to plant on the land, but other people desire to pass through the land. In this case, the farmer's utilization of the land cannot stop other people from passing through the land, and the travelers are even entitled to eat the produce of the land. Whether it will be worthwhile for the farmer to utilize the land depends on how many people travel through the land. If there are many people who pass through the land, then they will eat so much of the produce that it will not be worthwhile for the farmer to invest his efforts in the field. In this case, the greater benefit to society is that the field is used as a passageway and not as a field. On the other hand, if there are just a few people who pass through the land, then they will eat some of the produce, but, as they are not allowed to harvest the crops with a sickle or a container, then there could remain crops for the farmer that it would be worthwhile for him to utilize the field. In this case, the most efficient use of the land is for the field to be shared between the farmer and the people passing through.

This second case corresponds to the Coase Theorem in a case where there are no transaction costs. The presence of the field harms the people who want to pass through the land; the eating of the produce by the travelers harms the farmer. According to the Coase Theorem, the people would negotiate among themselves to arrive at the most efficient outcome. However, here there is no need to negotiate, as the farmer determines the value of the land by how much produce is left over for him to harvest, and, hence, there are no transaction costs. Accordingly, in this case, allowing both the farmer to utilize the field and the traveler to eat from the field enables society to allocate the use of the field in the most efficient manner without the need for government intervention.

A third possibility is that more than one person wants to plant crops in the field. Let us assume that *A* first began to utilize the field, and then *B* realizes that *A* had a very good idea. In this case, the fact that *A* is working the land harms *B* as he is not able to work the land, and conversely if *B* works the land, then *A* is harmed. Yet, in this case, *B* does not have to work the field. He is able to eat the produce from *A*'s work as *B* could repeatedly enter the field and eat from the crops. Thus, even though *A* was the first person to work the field, it is still in his interest to share the land with *B* because if *A* does not make a deal with *B*, then *A* will do all the work and still have to share the produce with *B*. Similarly, *B* has an incentive to make a deal with *A* because if *A* stops working the field, and *B* works the field, then *A* can eat the produce of his

work. Both *A* and *B* would negotiate to share the work and the produce on the field in the most efficient manner. These results would also apply if the land was also used for a pathway, as each party would have to calculate the decline in the value of the field due to the travelers in order to determine if it was worthwhile to work the land.

These results would apply even if more than two people wanted to work the land, as always the right to eat from the produce forces the incumbent farmers to negotiate with the new party. However, once there are negotiations, then there are transaction costs, which would increase with the number of people who desire to share the land. When the transaction costs would become greater than the benefits to the land, then the people would stop working the land. This last case corresponds to the Coase Theorem when there are transaction costs, as the possibility of achieving the most efficient outcome declines with the increase in transaction costs.

Not only do these cases provide examples of the Coase Theorem both with and without transaction costs, but they are also examples of the theorem with no property rights altogether. In all of the cases, nobody owns the land, but due to the right to eat from the produce, the parties involved are forced to negotiate to arrive at an efficient outcome.

## Conclusion

This article suggests that the law of Deuteronomy 23:25 and 26, which allows all people unlimited access to fields, is referring to ownerless fields that have only two possible uses—as farmland or as passageways for travelers. With this understanding, allowing the farmer the right to cultivate the land and other people to eat the produce of the field is an attempt to increase the efficient use of land in society. If the value of the land as a pathway for travelers is greater than the value of the land as farmland, then the field will remain as a passageway. However, if the value of the land as farmland is greater than the value of the land as a passageway, then the farmers will cultivate the land, provided the transaction cost from cultivating the land is lower than the expected benefits from the produce. These examples correspond to the Coase Theorem, as absent transaction costs, the land will achieve its maximum efficiency, but with sufficient transaction costs, then the land will not be used productively and will remain barren. With this understanding of Deuteronomy 23:25 and 26, the law can be viewed as a biblical precedent of the Coase Theorem.



## Notes

1. This formulation of the Coase Theorem is from Frank (2000), 590. This definition differs from other formulations, as for example Posner (1993), as the formulation here does not involve the question of property rights.
2. Translation from Christensen (2002), 552.
3. While the case in question refers only to grapes and grains, presumably these are only examples and the law would be applicable for all crops. See Babylonian Talmud, Baba Metzia 87b.
4. See commentary of Slotki (1949) on Isaiah 1:8. The author has seen examples of these watchtowers during a walk in the hills south of Modiin, Israel.
5. Babylonian Talmud, Baba Metzia 92a.
6. Plato (1970) also includes a similar provision to Deuteronomy 23:25 and 26 in his laws, but he explicitly limits the allowance to eat the produce to foreigners visiting from abroad.
7. Iyali (1996) suggests that this approach developed due to the economic crises in Palestine in the second century.
8. Baba Metzia, Mishnah 7:2. Translation adapted from Blackman (1963), 135.
9. Maimonides, Mishneh Torah, Laws of Hiring 12:1. Translation from Twersky (1972), 180. See Leibowitz (1980), 228–35, for a discussion of other commentators who defend the approach that the law is limited only to the laborer.
10. See his commentary on the Pentateuch (1965), 546.
11. Genesis 33:19 and 47:50 record two other purchases of land in the Pentateuch.
12. Jewish tradition (Babylonian Talmud, Sanhedrin 86a) understands the prohibition of theft in the Decalogue as only referring to kidnapping, and Benno Jacob (1869–1845, 1992, p. 573) has argued that the prohibition of theft cannot refer to possessions because “the ‘sacredness’ of possessions is a capitalistic notion.” However, as pointed out by Tigay (1996, p. 71) the simple reading of the text is that the “commandment, do not steal, prohibits all forms of theft.”
13. A similar law is also recorded in Leviticus 19:9 and Leviticus 23:22, and on both occasions again the text explicitly states that the person is harvesting his personal field.
14. For a recent discussion of the rights of the poor to harvest land see Schein (2003).

## References

- Blackman, Philip. 1963. *Mishnayoth*. New York: The Judaica Press.
- Christensen, Duane L. 2002. *World Bible Commentary*. Vol. 6b, *Deuteronomy 21:10–34:12*. Nashville: Thomas Nelson Publishers.
- Coase, Ronald H. 1960. “The Problem of Social Cost.” *Journal of Law and Economics* 3:144–71.
- . 1988. *The Firm, the Market and the Law*. Chicago: The University of Chicago Press.
- Doughty, Charles M. 1923. *Travels in Arabia Deserta*. New York: Boni and Liveright.
- Driver, S. R. 1965. *A Critical and Exegetical Commentary on Deuteronomy*. Edinburgh: T & T Clark.
- Frank, Robert H. 2000. *Microeconomics and Behavior*. 4th ed. New York: Irwin McGraw-Hill.
- Jacob, Benno. 1992. *The Second Book of the Bible: Exodus*. Translated by Walter Jacob. Hoboken, N.J.: Ktav Publishing House Inc.
- Josephus. 1934. *Jewish Antiquities*. Loeb Classical Library. Cambridge: Harvard University Press.
- Leibowitz, Nehama. 1980. *Studies in Devarim (Deuteronomy)*. Translated by Aryeh Newman. Jerusalem: The World Zionist Organization.
- Luzzatto, S. D. 1965. *Commentary to the Pentateuch* (Hebrew). Tel Aviv: Dvir.
- McCloskey, Deirdre. 1998. “The so-called Coase Theorem.” *Eastern Economic Journal* 24:367–71.
- Plato. 1970. *The Laws*. Translated with an introduction by Trevor J. Saunders. New York: Penguin Books.
- Posner, Richard A. 1993. “Nobel Laureate: Ronald Coase and Methodology.” *Journal of Economic Perspectives* 7:195–201.
- Robinson, Edward, 1970. *Biblical Researches in Palestine and the Adjacent Regions: A Journal of Travels in the Years 1838 and 1852*. 3d ed. Jerusalem: The Universitas Booksellers.
- Schein, Andrew. 2003. “Of Biblical Interest, Brotherhood and Charity.” *International Journal of Social Economics* 30:788–97.
- Slotki, Israel W. 1949. *Isaiah*. London: The Soncino Press.
- Tigay, Jeffrey H. 1996. *The JPS Torah Commentary: Deuteronomy*. Philadelphia: The Jewish Publication Society.
- Twersky, Isadore. 1972. *A Maimonides Reader*. New York: Behrman House.